

clarification made to gaseous effluent monitoring for tritium will not significantly reduce a margin of safety since tritium monitoring is still required for evolutions involving sodium processing and pipe cutting, and during other activities, unless results have determined tritium is not present during a given evolution.

The NRC staff has reviewed the licensee's analysis and, based on this review, it appears that the three standards of 10 CFR 50.92(c) are satisfied. Therefore, NRC staff proposes to determine that the amendment request involves no significant hazards consideration.

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*NRC Section Chief:* Claudia M. Craig, Duke Energy Corporation, et al., Docket Nos. 50-413 and 50-414, Catawba Nuclear Station, Units 1 and 2, York County, South Carolina

*Date of amendment request:* November 25, 2002.

*Description of amendment request:* The amendments would revise the Technical Specifications (TS) for the Ventilation Filter Testing Program (VFTP), Annulus Ventilation System (AVS), Auxiliary Building Filtered Ventilation Exhaust System (ABFVES), Fuel Handling Ventilation Exhaust System (FHVES), and Control Room Area Ventilation System (CRAVS), and containment penetrations.

*Basis for proposed no significant hazards consideration determination:* As required by 10 CFR 50.91(a), the licensee has provided its analysis of the issue of no significant hazards consideration, which is presented below:

The following discussion is a summary of the evaluation of the changes contained in this proposed amendment against the 10 CFR 50.92(c) requirements to demonstrate that all three standards are satisfied. A no significant hazards consideration is indicated if operation of the facility in accordance with the proposed amendment would not:

1. Involve a significant increase in the probability or consequences of an accident previously evaluated, or
2. Create the possibility of a new or different kind of accident from any accident previously evaluated, or
3. Involve a significant reduction in a margin of safety.

#### First Standard

Does operation of the facility in accordance with the proposed amendment involve a significant increase in the probability or consequences of an accident previously evaluated?

This licensee amendment request proposes amendments to the system TS and/or Bases and/or VFTP TS requirements for the AVS, ABFVES, FHVES, and CRAVS. It also proposes amendments to the TS and Bases for Containment Penetrations. The AVS is in standby during normal plant operations and operates only following a Safety Injection signal or during a test. It is not an accident initiator. The ABFVES is in operation during normal plant operations. However, the ABFVES is not used in direct support of any phase of power generation or conversion or transmission, shutdown cooling, fuel handling operations, or processing of radioactive fluids. Therefore, it is not an accident initiator. The FHVES is utilized to support fuel handling operations when moving recently irradiated fuel. It is not an accident initiator. The CRAVS operates during normal plant operations. However, it is not an accident initiator (the CRAVS being defined so as to exclude equipment that maintains an appropriately low temperature in the control room). The status of containment penetrations is required to be controlled so as to minimize the consequences of a fuel handling accident or a weir gate drop accident. The containment penetrations by themselves are not accident initiators. No accident initiators are associated with the changes proposed in this license amendment request. For these reasons, operation of the facility in accordance with this proposed amendment does not involve a significant increase in the probability of any accident previously evaluated.

In support of the proposed amendment, an analysis has been performed to determine the radiological consequences of the design basis LOCA [loss-of-coolant accident] at Catawba Nuclear Station. The analysis made use of the Alternative Source Term (AST) methodology and in general conformed to the regulatory positions of Regulatory Guide 1.183, ["Alternative Radiological Source Terms for Evaluating Design Basis Accidents at Nuclear Power Reactors," (ML003716792)

(Draft DG1081 Issued December 1999)] and the draft regulatory positions of DG-1111. Total Effective Dose Equivalent (TEDE) radiation doses at the Exclusion Area Boundary (EAB), boundary of the Low Population Zone (LPZ), and to the control room operators were calculated and found to be acceptable.

TEDE's have been estimated from the radiation doses with the current analysis (reported in the UFSAR [Updated Final Safety Analysis Report]) using the guidelines of Regulatory Guide 1.183 modified as reported in Appendix A of Attachment 3 [of the licensee's submittal dated November 25, 2002]. These TEDE's are compared to the limiting TEDE's from the proposed analysis as follows:

#### TEDE'S FOLLOWING THE DESIGN BASIS LOCA

Location	TEDE'S (Rem)	
	UFSAR	Proposed
EAB .....	9.95	7.21

#### TEDE'S FOLLOWING THE DESIGN BASIS LOCA—Continued

Location	TEDE'S (Rem)	
	UFSAR	Proposed
LPZ .....	1.90	3.97
Control Room .....	1.57	2.65

The new value for the control room TEDE radiation dose is higher than the TEDE radiation dose equivalent to the radiation doses currently reported in the UFSAR. However, the limiting control room TEDE radiation dose reported in this submittal is lower than the acceptance criterion by 47%. The new LPZ TEDE radiation dose is higher than the equivalent TEDE radiation dose currently represented. On the other hand, the margin to the acceptance criterion is 84%. The TEDE radiation doses newly computed at the EAB for the design basis LOCA is lower than the corresponding equivalent EAB TEDE radiation dose currently represented in the UFSAR. The margin in the EAB TEDE radiation dose to the guideline value is 71%. In all cases, there is significant margin between the newly calculated post-LOCA TEDE radiation doses and the corresponding regulatory guideline values. In the sense that the margins to the germane regulatory guideline values are still large, the new values of TEDE radiation doses are comparable to the equivalent TEDE associated with the post-LOCA radiation doses currently listed in the UFSAR. Therefore, the proposed amendment is determined to not result in a significant increase in accident consequences.

The changes proposed to the TS for Containment Penetrations are editorial in nature and will have no effect upon accident consequences.

The changes proposed to the VFTP TS for the AVS, ABFVES, and FHVES will not result in a significant increase in any accident consequences. The changes to make the penetration values for Unit 2 consistent with Unit 1 for the AVS, ABFVES, and FHVES are acceptable because the appropriate safety factors as delineated in the applicable regulatory guideline documents are still maintained. The change to the flowrate specified for the ABFVES is consistent with the design basis operation of this system. Also, the editorial changes proposed to the VFTP TS will have no impact on any accidents.

Operation of the facility in accordance with the proposed amendment does not involve a significant increase in the consequences of an accident previously evaluated.

#### Second Standard

Does operation of the facility in accordance with the proposed amendment create the possibility of a new or different kind of accident from any accident previously evaluated?

This proposed amendment does not involve addition, removal, or modification of any plant system, structure, or component. These changes will not affect the operation of any plant system, structure, or components as directed in plant procedures.